

Appln No. 09/575,181
Amtdt. Dated March 15, 2005
Response to Office Action of January 25, 2005

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of supporting a user in performing online bill payment, the method including the steps of: in a computer system:

providing print data to a printer, the print data being at least partially indicative of information relating to a bill paying transaction and an identity, the printer being responsive to the print data to print a printed form to the user, the printed form containing the information relating to a bill paying transaction, and including coded data indicative of an identity of the form and of at least one reference point of the form, at least some of the information and the coded data being coincident with the information, and the identity being indicative of an identity of the form of the form having been printed substantially simultaneously;

receiving, in a computer system, indicating data from a sensing device operated by the user, the indicating data being indicative of an identity of the form and of a position of the sensing device relative to the form, the indicating data having been generated by the sensing device using at least some of the coded data it sensed when placed in an operative position relative to the form; and

identifying, in the computer system and from the indicating data, at least one parameter relating to the bill paying transaction.

2. (Previously Presented) The method of claim 1 in which said at least one parameter relating to the bill paying transaction is associated with at least one zone of the form and in which the method includes identifying, in the computer system and from the zone indicated by the position of the sensing device as indicated by the indicating data, said at least one parameter.

3. (Previously Presented) The method of claim 2 wherein:

the indicating data includes movement data indicative of movement of the sensing device relative to the form, the sensing device having generated the movement data using at least some of the coded data, and wherein the at least one parameter is identified in the computer system by determining that the movement was at least partially within said at least one zone.

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4. (Currently Amended) A method of supporting a user in performing online bill paying, the method including the steps of, in a computer system:

providing print data to a printer, the print data being at least partially indicative of information relating to a bill paying transaction and at least one parameter of the bill paying transaction, the printer being responsive to the print data to print a printed-form to the user, the printed-form containing the information, relating to a bill paying transaction and including coded data indicative of the at least one at least one parameter of the bill paying transaction, the information and at least some of the coded data being coincident with the information of the form having been printed substantially simultaneously;

receiving, in a computer system, indicating data from a sensing device operated by the user, the indicating data being indicative of said at least one parameter and of movement of the sensing device relative to the form, the sensing device having generated the indicating data by sensing at least some of the coded data when the sensing device was moved relative to the form; and

interpreting, in the computer system, said movement of the sensing device as it relates to said at least one parameter.

5. (Currently Amended) A method of supporting a user in performing online bill paying, the method including the steps of, in a computer system:

providing print data to a printer, the print data being at least partially indicative of information relating to a bill paying transaction and an identity, the printer being responsive to the print data to print a using a printed-form containing information relating to a bill paying transaction, the form including coded data indicative of an the identity of the form; the method including the steps of:

receiving, in a computer system, indicating data from a sensing device, the indicating data being indicative of an identity of the user and of the identity of the form, the sensing device having determined the indicating data related to the identity of the user using identity data stored in the sensing device and having determined the indicating data relating to the identity of the form by sensing at least some of the coded data; and

identifying, in the computer system and from the indicating data, a bill paying transaction.

6. (Previously Presented) The method of claim 5, the coded data also being indicative

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of at least one parameter of the bill paying transaction, wherein the indicating data includes parameter information indicative of the at least one parameter of the bill paying transaction, the sensing device having determined the parameter information using at least some of the sensed coded data.

7. (Previously Presented) The method of claim 6 which includes receiving, in the computer system, movement data from the sensing device indicative of movement of the sensing device relative to the form, the sensing device having generated the movement data.

8. (Previously Presented) The method of any one of claims 2, 4 or 6 in which the at least one parameter is an action parameter of the bill paying transaction, the method including effecting, in the computer system, an operation in respect of the action parameter.

9. (Original) The method of claim 8 in which the action parameter of the bill paying transaction is selected from the group comprising:

requesting information relating to a bill, initiating bill payment, resetting the form, electronically forwarding a bill, paying a bill, printing a bill, canceling a bill payment, listing due bills, listing or adding billers, listing, adding or removing payment methods and listing or removing failed bills.

10. (Previously Presented) The method of any one of claims 3, 4 or 7 in which the at least one parameter is an option parameter of the bill paying transaction, the method including identifying, in the computer system, that the user has entered a hand-drawn mark by means of the sensing device and effecting, in the computer system, an operation associated with the option parameter.

11. (Original) The method of claim 10 in which the option parameter is associated with at least one of:

a payment method, card type, bill payment line, autopay option, and account type.

12. (Previously Presented) The method of any one of claims 3, 4 or 7 in which the at least one parameter is a text parameter of the bill paying transaction, the method including identifying, in the computer system, that the user has entered handwritten text data by means of the sensing device and effecting, in the computer system, an operation associated with the

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text parameter.

13. (Original) The method of claim 12 which includes converting, in the computer system, the handwritten text data to computer text.

14. (Original) The method of claim 13 in which the text parameter is associated with at least one of:

payment limit, account name, account number, cardholder name, card expiry date, autopay limit, payment amount and payment date.

15. (Previously Presented) The method of any one of claims 3, 4 or 7 in which the at least one parameter is an authorization parameter of the bill paying transaction, the method including identifying, in the computer system, that a payer has entered a handwritten signature by means of the sensing device, and effecting, in the computer system, an operation associated with the authorization parameter.

16. (Original) The method of claim 15 which includes verifying, in the computer system, that the signature is that of the payer.

17. (Original) The method of claim 16 in which the authorization parameter is associated with payment authorization, listing due bills, listing all bills, listing billers, listing payment methods, listing failed bills, adding a payment method and adding a biller.

18. (Previously Presented) The method of any one of claims 3, 4 or 7 in which the indicating data relates to a request, that a bill be printed locally.

19. (Original) The method of any one of claims 1, 4 or 5 in which:
a portion of the coded data is superimposed with a visual graphic, the visual graphic relating to the parameter associated with the portion.

20. (Original) The method of any one of claims 1, 4 or 5 in which the form is a bill.

21. (Original) The method of claim 1, 4 or 5 which includes supplying the form as part of a product or its packaging.

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22. (Original) The method of claim 21 in which the product is a printed periodical.
23. (Previously Presented) The method of claim 22 which includes printing the coded data to be invisible in the visible spectrum.
24. (Original) The method of any one of claim 1, 4 or 5 which includes retaining a retrievable record of each form generated, the form being retrievable using its identity as contained in its coded data.
25. (Previously Presented) The method of any one of claims 1, 4 or 5 which includes distribution of a plurality of the forms using conventional mail.
26. (Previously Presented) The method of claim 1 or 4 in which the sensing device contains an identification means which imparts a unique identity to the sensing device and identifies it as belonging to the user and in which the method includes monitoring, in the computer system, said identity.
27. (Original) The method of any one of claims 1, 4 or 5 which includes providing all required information relating to the bill paying transaction in the form to eliminate the need for a separate display device.
28. (Original) The method of any one of claims 1, 4 or 5 in which the form is printed on multiple pages and in which the method includes binding the pages.
29. (Currently Amended) A system configured to support a user in performing online bill paying, the system including:
a printer, the printer adapted to receive print data, the print data being at least partially indicative of information relating to a bill paying transaction and an identity, the printer being responsive to the print data to print a form, the form including:
 a printed form containing:
 the information relating to a bill paying transaction; and
 coded data indicative of an identity of the form and of at least one reference point of the form; and

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a computer system programmed and configured to:

receive indicating data from a sensing device, the indicating data being indicative of the identity of the form and a position of the sensing device relative to the form, the sensing device having sensed at least some of the coded data when placed in an operative position relative to the form and used at least some of the coded data to generate the indicating data; and

identify at least one parameter relating to the bill paying transaction.

30. (Original) The system of claim 29 in which said at least one parameter relating to the bill paying transaction is associated with at least one zone of the form.

31. (Original) The system of claim 29 which includes the sensing device, the sensing device sensing its movement relative to the form using at least some of the coded data.

32. (Previously Presented) A system configured to support a user in performing online bill paying, the system including:

a printer, the printer adapted to receive print data, the print data being at least partially indicative of information relating to a bill paying transaction and at least one parameter of the bill paying transaction, the printer being responsive to the print data to print
~~a printed-form containing: the information relating to a bill paying transaction and~~
coded data indicative of the at least one parameter of the bill paying transaction; and

a computer system programmed and configured to:

receive indicating data from a sensing device, the indicating data being indicative of said at least one parameter and of movement of the sensing device relative to the form, the sensing device, when moved relative to the form, having sensed at least some of the coded data and having determined the indicating data using at least some of the sensed coded data; and

interpret, from the indicating data, said movement of the sensing device as it relates to said at least one parameter.

33. (Previously Presented) A system configured to support a user in performing online bill paying, the system including:

a printer, the printer being adapted to receive print data, the print data being at least partially indicative of an identity, the printer being responsive to the print data to print—a

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~~printed~~ form including coded data indicative of an identity of the form; and

a computer system programmed and configured to:

receive indicating data from a sensing device, the indicating data being indicative of an identity of the user and the identity of the form, the sensing device having determined the indicating data related to the identity of the user using identity data stored in the sensing device and having determined the indicating data relating to the identity of the form by sensing at least some of the coded data; and

identify, from the indicating data, a bill paying transaction.

34. (Previously Presented) The system of claim 33 in which the coded data is also indicative of at least one parameter of the bill paying transaction, the indicating data also being indicative of the at least one parameter, wherein the computer system is configured and programmed to interpret the bill paying transaction using said at least one parameter of the bill paying transaction.

35. (Previously Presented) The system of claim 33, further including the sensing device, wherein indicating data includes movement data generated by the sensing device by sensing its movement relative to the form.

36. (Original) The system of any one of claims 29, 32 or 34 in which said at least one parameter of the bill paying transaction is selected from the group comprising an action parameter of the bill paying transaction, an option parameter of the bill paying transaction, a text parameter of the bill paying transaction, or an authorization parameter of the bill paying transaction.

37. (Original) The system of claim 36 in which the action parameter of the bill paying transaction is selected from the group comprising:

requesting information relating to a bill, initiating bill payment, resetting the form, electronically forwarding a bill, paying a bill, printing a bill, canceling a bill payment, listing due bills, listing or adding billers, listing, adding or removing payment methods and listing or removing failed bills.

38. (Original) The system of claim 36 in which the option parameter is associated with at least one of:

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a payment method, card type, bill payment line, autopay option, and account type.

39. (Original) The system of claim 36 in which the text parameter is associated with at least one of:

payment limit, account name, account number, cardholder name, card expiry date, autopay limit, payment amount and payment date.

40. (Original) The system of claim 36 in which the authorization parameter is associated with payment authorization, listing due bills, listing all bills, listing billers, listing payment methods, listing failed bills, adding a payment method and adding a biller.

41. (Original) The system of claim 36 in which the form is a bill.

42. (Original) The system of any one of claims 31, 32 or 35 in which the sensing device includes a marking nib.

43. (Previously Presented) The system of claim 31 or 32 in which the sensing device contains an identification means which imparts a unique identity to the sensing device and identifies it as belonging to a particular user.

44. (Original) The system of any one of claims 29, 32 or 33 in which the form is a surface of a surface-defining means and in which the system includes a printer for printing the form prior to distribution to a user.

45. (Previously Presented) The system of claim 44 in which the printer is configured to print the coded data at the same time as printing the form on the surface-defining means.

46. (Original) The system of any one of claims 29, 32 or 33 in which the coded data is substantially invisible in the visible spectrum.

47. (Original) The system of claim 29 or 33 which includes a database for keeping a retrievable record of each form generated, each form being retrievable by using its identity as included in its coded data.

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48. (Original) The system of claim 44 in which, to cater for a form printed on multiple pages, the printer includes a binding means for binding the pages.

49. (Previously Presented) A method of performing an online payment transaction, comprising the steps of:

obtaining from a network source, a bill paying form having coded data printed on it, the coded data being indicative of an identity of the form and being readable by a sensing device;

providing to a networked computer system, information from the sensing device, the information being based on at least some of the coded data sensed by the sensing; and

making a payment transaction associated with a bill or bills covered by the bill paying form.

50. (Previously Presented) The method of claim 49, wherein:

the information is indicative of the sensing device's time-varying location, the sensing device having sensed the information by sensing its time-varying acceleration via at least one accelerometer.

51. (Previously Presented) The method of claim 49, wherein:

the networked computer system comprises a local printer and the bill paying form is printed by the local printer.

52. (Previously Presented) The method of claim 49, wherein the form includes at least one signature zone, the sensing device having captured time-varying location data forming a series of strokes from which digital ink is derived, the method including the step of using the digital ink to recognize or authenticate a user.

53. (Previously Presented) The method of claim 49, wherein:

the sensing device comprises a wireless pen interface for capturing biometric data of a user, the information further comprising bio-metric information derived from the captured bio-metric data.

54. (Previously Presented) The method of claim 49, wherein the biometric data captured by the pen interface includes data from the group including: pen tilt, pen force and

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fingerprint data.

55. (Previously Presented) The method of claim 49, wherein the form is disposed on or in a surface of a product or its package.

56. (Previously Presented) The method of claim 49, wherein at least some of the coded data comprises at least one target, and an array of macrodots that encode data indicative of the identity of the form.

57. (Previously Presented) The method of claim 56, wherein the target area comprises orientation indicating corners.

58. (Previously Presented) The method of claim 49, wherein the coded data is substantially invisible.

59. (Previously Presented) The method of claim 58, wherein the coded data is provided with infrared absorbing media.

60. (Currently Amended) A method of supporting a user in performing online bill payment using the method including, a computer system:

providing print data to a printer, the print data being at least partially indicative of information relating to a bill paying transaction and an identity, the printer being responsive to the print data to print a printed form, the printed form containing:

the information relating to a bill payment transaction; and

coded data indicative of an identity of the form and of at least one reference point of the form, wherein at least some of the coded data is coincident with the information
~~information and the coded data of the form having been printed substantially simultaneously;~~

the method including the steps of:

receiving, in a computer system, indicating data from a sensing device operated by the user, the indicating data being indicative of an identity of the form and of a position of the sensing device relative to the form, the indicating data having been generated by the sensing device using at least some of the coded data it sensed when placed in an operative position relative to the form; and

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identifying, ~~in the computer system~~ and from the indicating data, at least one parameter relating to the bill paying transaction.

61. (Currently Amended) A method of supporting a user in performing online bill paying ~~the method including, in a computer system using a printed form containing:~~

providing print data to a printer, the printer being at least partially indicative of information relating to a bill paying transaction and at least one parameter of the bill paying transaction, the printer being responsive to the print data to print a form containing:

the information relating to a bill paying transaction; and

coded data indicative of the at least one parameter of the bill paying transaction, the information and being coincident with coded data of the form having been printed substantially simultaneously;

the method including the steps of:

receiving, in a computer system, indicating data from a sensing device operated by the user, the indicating data being indicative of said at least one parameter and of movement of the sensing device relative to the form, the sensing device having generated the indicating data by sensing at least some of the coded data when the sensing device was moved relative to the form; and

interpreting, in the computer system, said movement of the sensing device as it relates to said at least one parameter.

62. (Currently Amended) A method of supporting a user in performing online bill paying using a printer, the printer adapted to receive print data, the print data being at least partially indicative of information relating to a bill paying transaction, and an identity, the printer being responsive to the print data to print a printed form containing the information relating to a bill paying transaction, the form including coded data indicative of an identity of the form, the method including the steps of:

receiving, in a computer system, indicating data from a sensing device, the indicating data being indicative of an identity of the user and of the identity of the form, the sensing device having determined the indicating data related to the identity of the user using identity data stored in the sensing device and having determined the indicating data relating to the form by sensing at least some of the coded data; and

identifying, in the computer system and from the indicating data, a bill paying

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transaction.

63. (Currently Amended) A method of supporting a user in performing online bill payment using a printer, the printer adapted to receive print data, the print data being at least partially indicative of information relating to a bill paying transaction, and an identity, the printer being responsive to the print data to print a printed form, the form containing:

the information relating to a bill paying transaction; and

coded data indicative of ~~an~~ the identity of the form and of at least one reference point of the form, the information ~~and being coincident with the coded data of the form having been printed substantially simultaneously;~~

the method including the steps of:

sensing at least some of the coded data using a sensing device placed in an operative position relative to the form;

generating indicating data in the sensing device using at least some of the sensed coded data, the indicating data being indicative of an identity of the form and of a position of the sensing device relative to the form; and

sending the indicating data to a computer system that is configured to interpret, from the indicating data, at least one parameter relating to the bill paying transaction.

64. (Currently Amended) A method of supporting a user in performing online bill paying using a printer, the printer adapted to receive print data, the print data being at least partially indicative of information relating to a bill paying transaction, and at least one parameter of the bill paying transaction, the printer being responsive to the print data to print a printed form containing:

the information relating to a bill paying transaction; and

coded data indicative of the at least one parameter of the bill paying transaction, the information ~~and being coincident with the coded data of the form having been printed substantially simultaneously;~~

the method including the steps of:

sensing at least some of the coded data using a sensing device placed in an operative position relative to the form;

generating indicating data in the sensing device using at least some of the sensed coded data as the sensing device is moved relative to the form, the indicating data being indicative of said at least one parameter and of movement of the sensing device relative to

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the form; and

sending the indicating data to a computer system that is configured to interpret, from the indicating data, said movement of the sensing device as it relates to said at least one parameter.

65. (Currently Amended) A method of supporting a user in performing online bill paying using a printer, the printer adapted to receive print data, the print data being at least partially indicative of information relating to a bill paying transaction, and an identity, the printer being responsive to the print data to print a printed form containing the information relating to a bill paying transaction, the form including coded data indicative of ~~an~~ the identity of the form, the method including the steps of:

sensing at least some of the coded data using a sensing device placed in an operative position relative to the form;

generating indicating data in the sensing device, the indicating data being indicative of an identity of the user and of the identity of the form, the sensing device having determined the indicating data related to the identity of the user using identity data stored in the sensing device and having determined the indicating data relating to the form by sensing at least some of the coded data; and

sending the indicating data to a computer system that is configured to interpret, from the indicating data, a bill paying transaction.